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—— **and J. R. Frederick.** Supersonic reflectoscope; an instrument for inspecting the interior of metal parts by means of sound waves. **16**: 100(A)—1944

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—— **and L. A. MacColl.** Theorem on directivity patterns. **16**: 100(A)—1944

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Role of the college and university hearing clinic. Miriam D. Pauls. **16:** 98—1944
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Pressure and field response of the ear in hearing aid performance determination. C. J. LeBel. **16:** 99—1944

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4.6 Loudness. Threshold Determinations

PAPER
Air- and bone-conduction audio testing assembly. Norman A. Watson. **16:** 194—1945
Pressure and field response of the ear in hearing aid performance determination. C. J. LeBel. **16:** 63—1944

ABSTRACT
Air- and bone-conduction audio-testing assembly. Norman A. Watson. **16:** 98—1944

4.7 Masking

PAPER
Some experimental evidence for peripheral auditory masking. Karl Lowy. **16:** 197—1945

ABSTRACT
Evidence for the existence of peripheral auditory masking. Karl Lowy. **16:** 98—1944

4.13 Ear Acoustical Impedance

ABSTRACT
Ear and closed coupler acoustic impedance. G. S. Cook and P. Chrzanowski. **16:** 102—1944

5. Applied Acoustics. Instruments and Apparatus

5.1 General, Unclassified

PAPER
Recording Lissajous figures. Wayne B. Hales. **16:** 137—1945
Singing flames. Arthur Taber Jones. **16:** 254—1945

ABSTRACT
Application of acoustical methods to mining problems. Leonard Obert. **16:** 100—1944

PATENTS
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PAPER
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Ear and closed coupler acoustic impedance. G. S. Cook and P. Chrzanowski. **16:** 102—1944
Wide-range adjustable acoustic impedance. Willard F. Meeker and Frank H. Slaymaker. **16:** 102—1944

PATENT
Mechanical impedance measuring device. **16:** 287—1945

5.4 Analyzers and Filters. Acoustic Filters. Oscillographs

PAPER

Acoustic sound filtration and hearing aids. Frederick M. Grossman and Charles T. Molloy. **16**: 52—1944
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PATENTS

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Recording Lissajous figures. Wayne B. Hales. **16**: 137—1945

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Production of inharmonic subfrequencies by a loudspeaker. R. V. L. Hartley. **16**: 206—1945

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5.9 Microphones. Vibration Microphones. Microphone Calibration Equipment

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5.10 Navigational Instruments. Depth and Altitude Measuring Instruments. Geophysical Prospecting. Underwater Sound. Submarine Detectors

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5.13 Public Address Systems and Sound Picture Installations

PATENTS

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5.14 Rayleigh Disks. Reverberation Measuring Instruments (see 2.8)

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5.16 Sound Recording and Reproducing. Speech Instruments. Supersonic Instruments (see 10.3)

PAPER

Notes on distortion in phonograph reproduction due to needle wear. B. B. Bauer. **16**: 246—1945

PATENTS

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5.19 Tuning Forks

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PAPER

Some problems for postwar musical acoustics. Robert W. Young. **16**: 103—1944

ABSTRACT

Physics of music. Alexander Wood. **16**: 129—1944
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PATENTS

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Musical instrument. **16**: 228—1945

6.3 Brass

ABSTRACT

Analysis of tones of wind instruments and of resonating strings. F. A. Saunders. **16**: 101—1944

PATENTS

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6.4 Drums and Traps

PATENTS

Musical instruction device. **16**: 91—1944
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6.5 Organs

PATENTS

Multiple magnetic valve for organs. **16**: 92—1944

6.6 Pianos

ABSTRACT

Clang tone of the pianoforte. Armand F. Knoblaugh. **16:** 102—1944

PATENTS

Escapement action for grand pianos. **16:** 92—1944
Operating means for piano actions. **16:** 92—1944
Piano action. **16:** 294, 295—1945
Piano pin block. **16:** 92—1944

6.7 Violin Family

ABSTRACT

Analysis of tones of wind instruments and of resonating strings. F. A. Saunders. **16:** 101—1944

PATENTS

Multistringed musical instrument. **16:** 134—1944
Process and apparatus for making gut strings. **16:** 93—1944
Stringed musical instrument. **16:** 93—1944; 295—1945
Tuning head for stringed instruments. **16:** 229—1945

6.8 Wood Winds

PAPER

Intonation of the Boehm clarinet. C. S. McGinnis and R. Pepper. **16:** 188—1945

ABSTRACT

Analysis of tones of wind instruments and of resonating strings. F. A. Saunders. **16:** 101—1944

PATENTS

Reed for musical instruments. **16:** 93—1944

6.9 Electronic Musical Instruments

PATENTS

Duophonic electrical musical instrument. **16:** 295—1945
Electric instrument. **16:** 94—1944
Electrical musical instrument. **16:** 93, 94—1944, 229—1945
Musical instrument. **16:** 135—1944; 296—1945
Sound generator. **16:** 296—1945

7. Noise

7.6 Noise in Buildings

PATENTS

Acoustic attenuator for air impellers. **16:** 95—1944
Door. **16:** 95—1944
Method and means for acoustical treatment. **16:** 95—1944

7.7 Machinery Noise

PATENTS

Internal combustion engine exhaust system. **16:** 97—1944; 296—1945
Mechanical exhaust silencer. **16:** 95—1944
Method of assembling silencers. **16:** 96—1944
Muffler. **16:** 96, 97—1944; 296, 297—1945
Silencer. **16:** 96—1944; 297—1945
Silencer for gas heaters. **16:** 297—1945
Spark arrester silencer. **16:** 97—1944
Suction cleaner. **16:** 95, 96—1944
Suction muffler for airplanes, automobiles, and the like. **16:** 97—1944
Water cooled silencer. **16:** 96—1944

8. Standards

9. Speech and Singing

9.1 General, Unclassified

ABSTRACT

Speech reading—Jena method. Anna M. Bunger. **16:** 211—1945

10. Supersonics (Ultrasonics)

10.3 Supersonic Instruments

PAPER

Curved quartz crystals as supersonic generators. L. W. Labaw. **16:** 237—1945

ABSTRACT

Curved quartz crystals as supersonic generators. L. W. Labaw. **16:** 100—1944
Fixed path supersonic interferometer for liquids. J. W. Ballou and J. C. Hubbard. **16:** 100—1944
Supersonic interferometer as an industrial tool for the study of liquids and solids. Elias Klein and J. W. Fitzgerald. **16:** 100—1944
Supersonic reflectoscope; an instrument for inspecting the interior of metal parts by means of sound waves. F. A. Firestone and J. R. Frederick. **16:** 100—1944

10.4 Gases, Supersonic Velocities, Dispersion, and Absorption (see also 11.3)

PAPER

Kneser's sound absorption nomogram and other charts. W. H. Pielemeier. **16:** 273—1945
Velocity of sound in vapors. K. Matta and M. Mokhtar. **16:** 120—1944

10.5 Liquids, Supersonic Velocities, Dispersion, and Absorption

PAPER

Supersonic transmission at oblique incidence through a solid plate in water. J. B. Smyth and R. B. Lindsay, **16:** 20—1944

ABSTRACT

Fixed path supersonic interferometer for liquids. J. W. Ballou and J. C. Hubbard. **16:** 100—1944

10.6 Solids, Supersonic Velocities, Dispersion, and Absorption

PAPER

Review of supersonic methods for measuring elastic and dissipative properties of solids. Sidney Siegel. **16**: 26—1944

Supersonic transmission at oblique incidence through a solid plate in water. J. B. Smyth and R. B. Lindsay. **16**: 20—1944

ABSTRACT

Measurements of elastic and dissipative properties of solids by supersonic methods. Sidney Siegel. **16**: 99—1944

10.8 Chemical Effects of Supersonic Waves

PAPER

Some applications of ultrasonics in high-polymer research. H. Mark. **16**: 183—1945

ABSTRACT

High frequency treatment and investigation of organic high polymers. H. Mark. **16**: 100—1944

11. Waves and Vibrations

11.3 Propagation of Sound, Absorption during Propagation. Velocity of Sound. (See also 10.4)

PAPER

Kneser's sound absorption nomogram and other charts. W. H. Pielemeier. **16**: 273—1945

Young's modulus of elasticity of fibers and films by sound velocity measurements. J. W. Ballou and S. Silverman. **16**: 113—1944

ABSTRACT

Anelasticity of metals. Clarence Zener. **16**: 100—1944

Precision method for the determination of the velocity of sound in air. R. W. Leonard. **16**: 101—1944

Young's modulus of elasticity of fibers and films by sound velocity measurements. J. W. Ballou and S. Silverman. **16**: 100—1944

11.4 Radiation from Vibrating Objects. Acoustical Impedance. Mechanical Impedance. (See also 5.3)

PAPER

Acoustic intensity distribution from a "piston" source. A. O. Williams and L. W. Labaw. **16**: 231—1945

Effect of radiation on the vibrations of a circular diaphragm. Melvin Lax. **16**: 5—1944

On the theory of the directional patterns of continuous source distributions on a plane surface. R. Clark Jones. **16**: 147—1945

Wide range adjustable acoustic impedance. Willard F. Meeker and Frank H. Slaymaker. **16**: 178—1945

ABSTRACT

Theorem on directivity patterns. R. Clark Jones and L. A. MacColl. **16**: 101—1944

Wide-range adjustable acoustic impedance. Willard F. Meeker and Frank H. Slaymaker. **16**: 102—1944

11.5 Sounds of Finite Amplitude. Distortion

PAPER

Action of a direct radiator loudspeaker with a non-linear cone suspension system. Harry F. Olson. **16**: 1—1944

Production of inharmonic subfrequencies by a loudspeaker. R. V. L. Hartley. **16**: 206—1945

ABSTRACT

Action of a direct radiator loudspeaker with a nonlinear cone suspension system. Harry F. Olson. **16**: 100—1944

11.6 Sound in Tubes

PAPER

Attenuation of sound in lined ducts. Charles T. Molloy and Esther Honigman. **16**: 267—1945

Propagation of sound in lined ducts. Charles T. Molloy. **16**: 31—1944

Reflection of sound due to a change in cross section of a circular tube. John Miles. **16**: 14—1944

ABSTRACT

Propagation of sound in lined ducts. Charles T. Molloy. **16**: 102—1944

11.7 Theory of Waves and Vibrating Systems. (See also 5.4)

PAPER

Action of a direct radiator loudspeaker with a non-linear cone suspension system. Harry F. Olson. **16**: 1—1944

Effect of radiation on the vibrations of a circular diaphragm. Melvin Lax. **16**: 5—1944

Recording Lissajous figures. Wayne B. Hales. **16**: 137—1945

Singing flames. Arthur Taber Jones. **16**: 254—1945

Supersonic transmission at oblique incidence through a solid plate in water. J. B. Smyth and R. B. Lindsay. **16**: 20—1944

ABSTRACT

Sound wave fields within cavities. Richard K. Cook. **16**: 102—1944

Table of the Bessel functions $J_0(Z)$ and $J_1(Z)$ for complex arguments. Prepared by the Mathematical Tables Project of the Work Projects Administration of the Federal Works Agency. **16**: 81—1944

Theorem on directivity patterns. R. Clark Jones and L. A. MacColl. **16**: 101—1944

Transients in linear systems. Volume I. Murray F. Gardner and John L. Barnes. **16**: 80—1944

SUBTITLE

Frequency response of a Helmholtz resonator. **16**: 124—1944

12. General, Unclassified